PROJECT REPORT

AN ARDUINO TOLL GATE PAYMENT SYSTEM BASED ON THE NUMBER OF TIRE AXES

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2018

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ABSTRACT

Payment in toll gates based on the number of tire axes can speed up the payment process, vehicle distinguished the number of tire axes. Vehicle will pay based on the number of tire axes. This project is toll gate payment system based on the number of tire axes in accordance based on regulations.

This system makes it easy to calculate the number of tire axes. This project use sensor : Laser detector, LDR, IR Obstacle. Laser detector will detect if any vehicle will enter the toll gate. Then sensor counter will calculate the number of tire axes.

The result of sensor IR Obstacle is uploaded to IoT Thingspeak use Arduino Uno connected to Esp-01. Data from IoT thingspeak server can be used to control the number of vehicles entering the toll gate

Keyword : IoT, Thingspeak, Toll gate, Arduino

PREFACE

This report there are VI chapter. Chapter I will discuss the background and scope of the project. Chapter II will discuss the references used in this project and what are the differences, in chapter II describes the journal used, in this project using three journals from different projects. Chapter III will be discussed the research methodology, the steps of project will be explained in chapter III. Chapter IV will discuss analysis about sensors and functions sensors will be use in this project. Chapter IV also discuss the flowchart and design from the project. Then chapter V will be discussed implementation code in this project and test the code also test shown in Thingspeak, Then the last Chapter VI conclusions and the project forward.

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